

### **DETAILED ACTION**

THIS FINAL ACTION IS RESPONSIVE TO THE AMENDMENT FILED 8/25/2008.

- Claims 7, 13, 27, and 31-35 are canceled.
- Claims 1, 8-12, 14-18, and 25 were amended.
- Claims 1-6, 8-12, 14-26, and 28-30 are pending.

#### ***Claim Objections***

[1] Claim(s) 1 and 7 were previously objected to because of informalities. Applicant has successfully addressed these issues in the amendment filed on 8/25/2008. Accordingly, the objection(s) to the claim(s) 1 and 7 have been withdrawn.

#### ***Claim Rejections - 35 USC § 112***

[2] Though applicant addressed all rejections under 35 USC § 112 to the Claims in the amendment filed 8/25/2008; issues still remain (including issues with amended claim 1), the examiner therefore not able to withdraw the 35 USC § 112 rejections.

More specifically:

Per the following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[3] Claims 1, 9, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. First, with regard to claim 1, it states of a "plurality of supplementary members extended from a circumference of the hub to a space between the ribs and coupled to a lower part and an upper part of the ribs alternatively". This statement is considered indefinite by the examiner. Where exactly is the lower part of the rib? Is it the part closest to the hub, or the part at the bottom of the rib? A similar inquiry can be made for the

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upper part of the rib. Further, the term “alternatively” as used in the above statement fails to fully encompass what the examiner believes the applicant is attempting to articulate. It is apparent to the examiner that applicant should fully address the location of each pertinent structure first, and then move to claiming said structures relative to one another around the circumference of the lock nut instead of attempting to claim everything at once.

Further, with regard to amended claims 9 and 25, the structure purported by such statements is once again unclear to the examiner. Though it is stated that the first and second sides of the ribs are inclined so as to be gradually thickened along a radial direction, it is never stated in which direction said incline occurs and whether the thickness accompanying this incline is increasing or decreasing. It is only stated that the incline gets thicker in or along the radial direction. Which direction? Towards the hub or away from the hub?

***Claim Rejections - 35 USC § 102***

[4] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the

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international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[5] Claims 1-8, 10-12, 14-21 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Grube, US-4,281,699, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

The shape and appearance of Grube is identical in all material respects to that of the claimed design, *Hupp v. Siroflex of America Inc.*, 122 F.3d 1456, 43 USPQ2d 1887 (Fed. Cir. 1997).

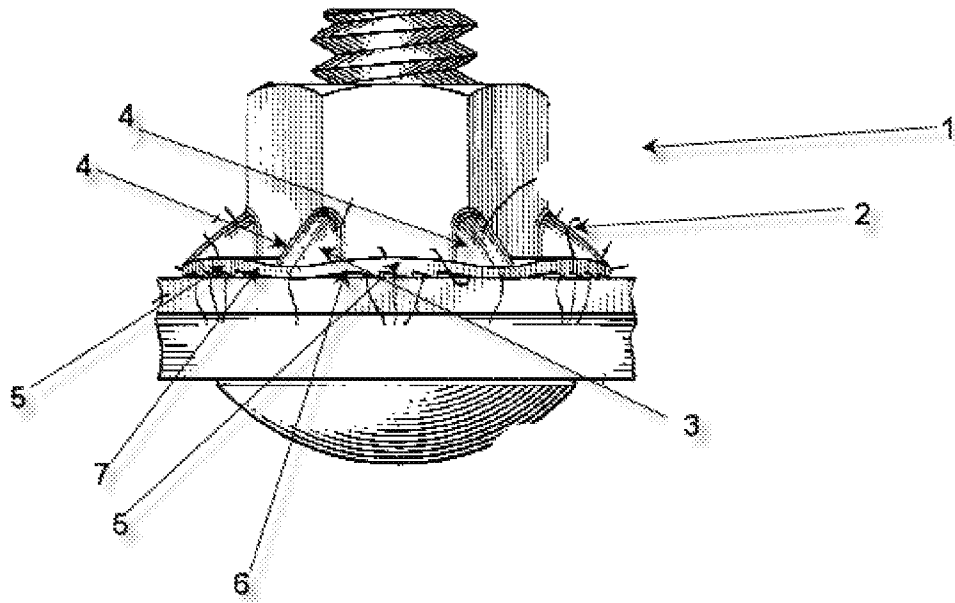
AS BEST UNDERSTOOD, as for Claim 1, Grube discloses of a lock nut (1) (see figure below) [for a leg assembly of electric home appliances], comprising:

a plurality of ribs (2) extending in a radius direction from a circumference of a hub, each rib having first (3) and second sides (4) over which [a tool or finger for rotating the hub about a leg bolt passing through the hub]; and

a plurality of supplementary members (5) extended from a circumference of the hub to a space between the ribs (2) and coupled to a lower part and an upper part of the ribs (the supplementary member 5 can be considered as extending from the hub between the ribs, while coupled to both a lower part (area near the hub) and an upper part (outward area away from hub)), alternatively (since the supplementary member is coupled to both the upper and lower part of each rib, it also reads onto the "alternatively" statement as well).

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wherein an inclination direction of a first supplementary member (5) adjacent to the first side (3) and an inclination direction of a second supplementary member (5) adjacent to the second side (4) are upward (at 6) and downward (at 7) alternatively.



The above statement in brackets is an example of intended use, with the prior art only needing to be capable of performing said function to be anticipatory towards that of the prior art, and in the instant case, the lock nut as presented by Grube is indeed capable of being used for a leg assembly of electric home appliances, as well as having a tool or finger access said nut (at the locations as claimed above) for rotating the hub. Note that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

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Re: Claim 2, wherein the height of the rib (2) is same as or lower than that of the hub, and the height of the supplementary member (5) is lower than that of the rib (2).

Re: Claim 3, wherein the first (3) or second side (4) is perpendicular to a horizontal plane.

Re: Claim 4, wherein the first (3) or second side (4) is inclined to a perpendicular line.

Re: Claim 5, wherein at least one of the first (3) and second (4) sides of the rib (2) gets larger (the sides, 3 and 4 possess a longer diameter the farther they are from the hub) from the hub toward an end to the rib (2).

Re: Claim 6, wherein an end portion and both first and second sides of the rib (2) are geared to the [tool when the tool accessed from the radius direction of the hub].

Re: Claim 7, wherein the supplementary member (5) comprises an extension member (5) extended from a circumference of the hub to a space between the ribs (2).

Re: Claim 8, wherein the first (3) or second side (4) is inclined to a perpendicular line.

Re: Claim 10, wherein the supplementary member (5) is extended from a center of a height direction of the hub, and has a lower height than the rib (2).

Re: Claim 11, wherein the supplementary member (5) is inclined [such that the tool or finger accessed from the radius direction of the hub easily touches the first and second side].

Re: Claim 12, wherein the extension member (5) is inclined such that a first end of thereof of being coupled with the hub is higher than a second end thereof being adjacent to the end portion of the rib (2).

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Re: Claim 14, wherein an end portion of the supplementary (5) is provided to be adjacent to a lower part or upper part of the end portion of the rib (2) such that a single exposed area of a portion being adjacent to the end portion of the rib on the sides becomes larger.

Re: Claim 15, wherein a center portion of the end portion of the supplementary member (outer 5) is curved toward the hub.

Re: Claim 16, wherein an end portion of the rib (2) forms a corner of the lock nut (1).

Re: Claim 17, wherein an end portion of the rib (2) is rounded.

Re: Claim 18, wherein the supplementary member (5) comprises a rim (outer 5) for coupling the end portion of the ribs (2).

Re: Claim 19, wherein the rim (outer 5) is lower than the rib (2) and coupled with an upper or lower part of the rib (2).

Re: Claim 20, wherein the rim (outer 5) is provided to be perpendicular to a horizontal plane.

Re: Claim 21, wherein one (outer 5) of two rims (inner and outer 5) located both sides of the end portion of the rib (2) is coupled with an upper part of the rib (2), and the other rim (inner 5) is coupled with a lower part thereof.

### ***Claim Rejections - 35 USC § 103***

[6] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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[7] Claims 22-24, 26, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube, US-4,281,699, in view of Johnson, US-3,868,079.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 22, Grube teaches of a lock nut (1) for a leg assembly (see figure below), comprising:

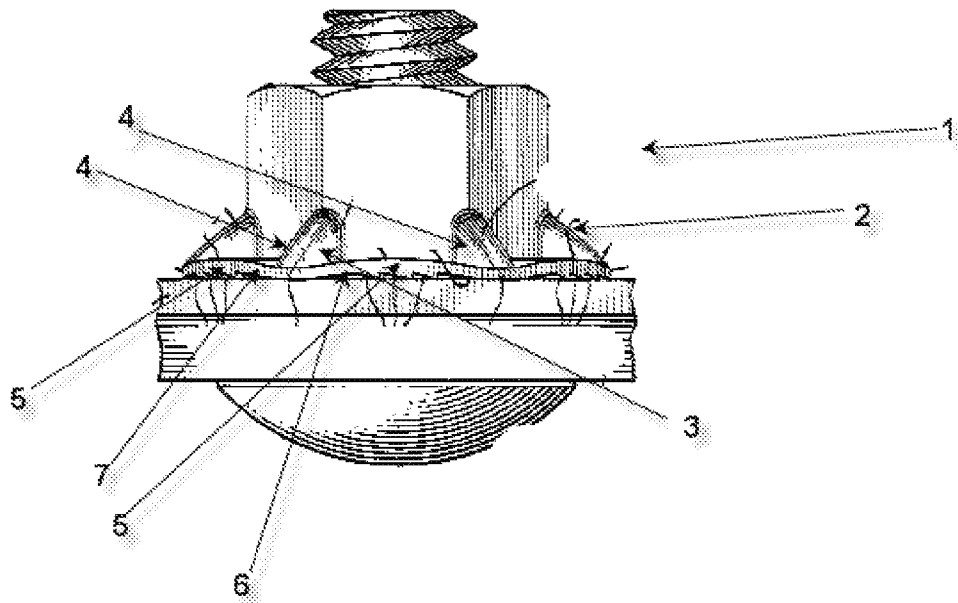
a hub having a screw hole through which a leg bolt passes, the leg bolt coupled with an electric home appliance;

a plurality of ribs (2) extended in a radius direction from a circumference of the hub, each having first (3) and second sides (4) over which [a tool or finger accessed from the radius direction of the hub is hooked so as to rotate the hub about the leg bolt];

a plurality of extension members (5), each extension member (5) being extended from a circumference of the hub to a space between the ribs (2); and

a rim (outer portion of 5) for coupling end portion of the ribs(2),

wherein an inclination direction (6) of a first extension member (5) adjacent to the first side (3) is different than an inclination direction (7) of a second extension member (5) adjacent to the second side.



The difference between the claim and Grube is that Grube does not expressly state that the locking nut is used in conjunction with a leg bolt coupled with an electric home appliance. First, it is extremely obvious and apparent to one skilled in the art of fasteners of the diverse functionality of locking nuts. The use of locking nuts for a variety of applications including that of with home appliances is widely held and understood to those in the art. To show the use of a nut in conjunction with a leg bolt coupled with an electric home appliance the examiner submits the reference of Johnson. Johnson discloses a threaded locking nut attached to a leg bolt of a home appliance, specifically a washing machine. Thus, it would have obvious to one skilled in the art to have used the locking nut as provided by Grube with numerous applications, one of which being integral with a leg bolt coupled with a home appliance as shown by Johnson. One would want such a configuration so as to help deter inadvertent removal of the leg bolt and



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support the leg bolt during various movements while being attached to the washing machine assembly.

Re: Claim 23, wherein the first (3) or second side (4) is perpendicular to a horizontal plane.

Re: Claim 24, wherein the first (3) or second side (4) is inclined to a perpendicular line.

Re: Claim 26, wherein one of the first and second extension members (5) is inclined such that a first end (inner 5) of thereof of being coupled with the hub is higher than a second end (outer 5) thereof being adjacent to the end portion of the rib (2).

Re: Claim 28, wherein the rim (outer 5) is perpendicularly extended from the end of the extension member (inner 5) to an upper part or lower part of the rim (2).

Re: Claim 29, wherein one (outer 5) of two rims (inner and outer 5) located both sides of the end portion of the rib (2) is coupled with the upper part of the rib (2), and the other rim (inner 5) is coupled with the lower part thereof.

Re: Claim 30, wherein the coupling portion of the rib (2), one of the extension members (5), and the rim (outer 5) is rounded.

#### ***Allowable Subject Matter***

[8] Claims 9 and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

[9] Applicant's amendments and arguments filed 8/25/2008 regarding rejections under 35 U.S.C. 102 have been fully considered but they are not persuasive. Applicant's argument

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concerning Grube's applicability with regard to claim 1 is considered moot to the above 112 rejections and examiner's interpretation of Grube in view of such. With regard to claim 22, the applicant argues that Grube does not disclose or suggest an inclination direction of a first extension member adjacent to the first side is different than an inclination direction of a second extension member adjacent to the second side. The examiner disagrees. As shown and disclosed above, the examiner maintains tht the prior art of Grube does indeed disclose of wherein an inclination direction (6) of a first extension member (5) adjacent to the first side (3) is different than an inclination direction (7) of a second extension member (5) adjacent to the second side.

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***Conclusion***

**[10] THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**[11]** Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached at (571) 272-6987. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Reese

/D. C. R./

Examiner, Art Unit 3677

/Victor Batson/

Supervisory Patent Examiner, Art Unit 3677